FREY ENVIRONMENTAL, INC.

Environmental Geologists, Engineers, Assessors

2817 A Lafayette Avenue Newport Beach, CA 92663 (949) 723-1645 Fax (949) 723-1854 Email: freyinc@freyinc.com

March 25, 1999 172-01

Wendy Liu Regional Water Quality Control Board Los Angeles Region 320 West 4th Street, Suite 200 Los Angeles, California 90013

GROUNDWATER MONITORING WELL SAMPLING FIRST QUARTER 1999 FORMER MONDO CHROME FACILITY 4933 FIRESTONE BOULEVARD SOUTH GATE, CALIFORNIA



Dear Ms. Liu

This letter presents the results of groundwater sampling activities for the first quarter of 1999 at the site of the former Mondo Chrome facility located at 4933 Firestone Boulevard in South Gate, California (Figure 1).

SUMMARY OF ACTIVITIES

On March 3, 1999, groundwater monitoring wells MW1, MW2 and MW3 were measured for depth to water and checked for the presence of light non-aqueous phase liquids (LNAPLs). LNAPLs were not detected in wells MW1, MW2 or MW3 which were then purged and sampled according to the procedures presented in Appendix A.

Groundwater samples were analyzed for halogenated volatile organic compounds in general accordance with EPA Method No. 8021. Groundwater samples were also analyzed for total chromium and cadmium in general accordance with EPA Method No. 200.7 and for hexavalent chromium in general accordance with EPA Method No. 3500.

Groundwater purged from the wells is temporarily being stored on-Site in 55-gallon drums. The purged groundwater will be transported and disposed of at a State-certified recycling facility at a later date.

RESULTS

- Tetrachloroethene (PCE) and trichloroethene (TCE) were detected at concentrations of 140 micrograms per liter (ug/L) and 190 ug/L, respectively, in the water sample collected from well MW1. No other compounds analyzed as part of EPA Method No. 8021 were detected in the groundwater sample collected from MW1. Chromium was detected at a concentration of 19 ug/L in the water sample collected from well MW1.
- PCE, TCE and cis-1,2-Dichloroethane (cis-1,2-DCE) were detected at concentrations of 6.5 ug/L, 130 ug/L and 13 ug/L, respectively, in the groundwater sample collected from well MW2. No other compounds analyzed as part of EPA Method No. 8021 were detected in the groundwater sample collected from MW2. Chromium was detected at a concentration of 33 ug/L in the water sample collected from well MW2.
- PCE, TCE and cis-1,2-DCE were detected at concentrations of 5.1 ug/L, 100 ug/L and 6.4 ug/L, respectively, in the groundwater sample collected from well MW3. No other compounds analyzed as part of EPA Method No. 8021 were detected in the groundwater sample collected from MW3. Chromium was detected at a concentration of 68 ug/L in the water sample collected from well MW3.
- Hexavalent chromium and cadmium were not detected above the laboratory detection limits of 20 ug/L and 4 ug/L, respectively, in groundwater samples MW1, MW2 or MW3.
- The direction of groundwater flow was toward the southwest at an estimated gradient of 0.0005 feet per foot on March 3, 1999. A site sketch showing groundwater elevations and estimated groundwater flow direction on March 3, 1999 is presented on Figure 2.
- Calculated groundwater elevations and chemical analytical data have been summarized in Table 1. Laboratory reports are presented in Appendix B.

nvironmental.

Joe Frey Principal Certified

CEG #1500

Engineering Geologist

Senior Project Geologist

Enclosures:

Figure 1 - Location Map

Figure 2 - Site Sketch Showing Groundwater Elevations and Estimated Groundwater Flow Direction on March 3, 1999.

Appendix A - Field Procedures

Appendix B- Laboratory Results

ce: Mr. Howard Kay
The Kay Companies
475 Seventeenth Street
Suite 940
Denver, CO 80202

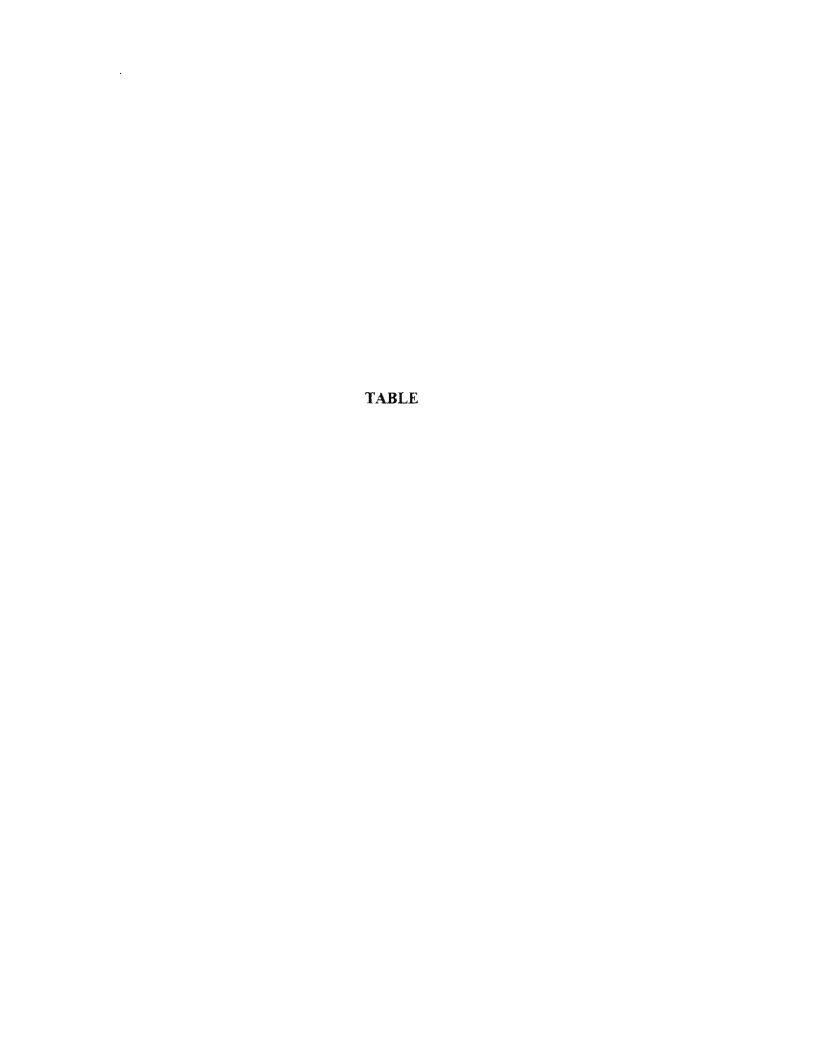
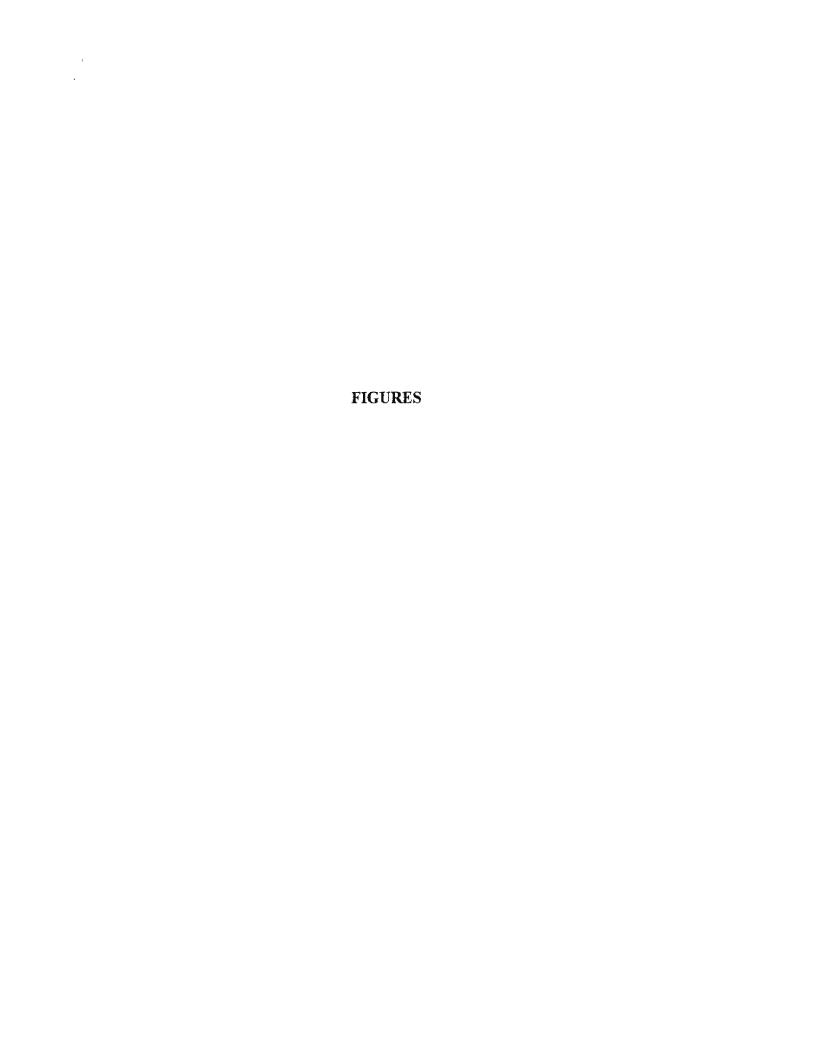


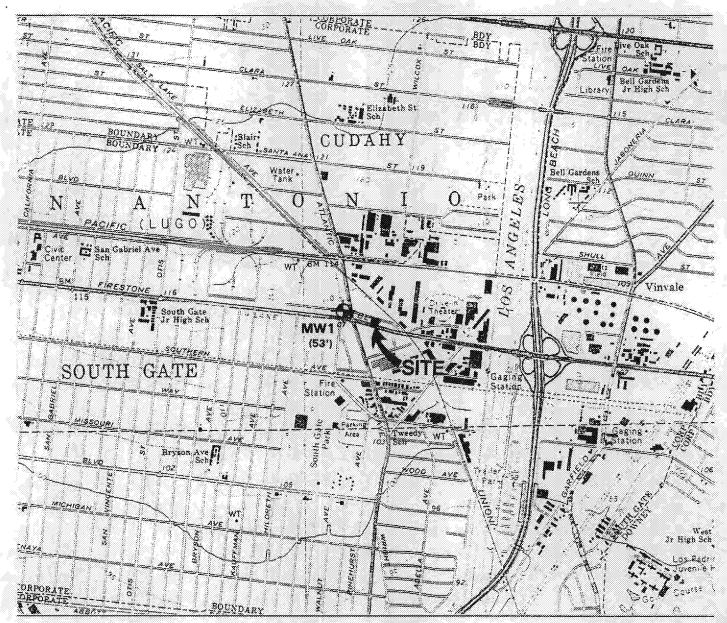
TABLE 1 GROUNDWATER LEVELS AND CHEMICAL ANALYSES FORMER MONDO CHROME FACILITY 4933 FIRESTONE BOULEVARD SOUTH GATE, CALIFORNIA

· Wal No	Well Ekcyacion (fi-msi)	Interval	Data Sampled	Depth to Groundwater (feet)	Choundyater F. Lievapian (frasi)	PCR ug/l (ppb)	TCV ug/l (ppb)	cis-1,2-DCE ug/l (ppb)	1,1-DCE ug/l (ppb)	Chromium ug/l (ppb)	Chrosnium IV ug/l (ppb)	Cadmium ug/l (ppb)
MWI	109,40	30-55	12/07/98 03/03/99	41.58 40.71	67.82 68.69	110 140	140 190	6.8 <10.0	<1 0 <16 0	NA 19	NA <20	NA <4
MW2	109.45	30-55	12/07/98 03/03/99	41,68 40,81	67.77 68.64	11 6.5	77 130	16 13	<1 0 <4 0	NA 33	NA <20	NĄ <4
MW3	109 61	30-55	12/07/98 03/03/99	41.78 40,94	67 83 68 67	9.3 5.1	75 100	10 64	1.7 <4.0	NA 68	NA <20	NA <4
DTSC M	I Es	(************************************				5	5	6	6	50	NA	5

Notes

- 1) Well elevation recorded at top of casing
- 2) PCE = Tetrachloroethene
- 3) TCE = Trichloroethene
- 4) 1,2-DBE = 1,2 Dibromoethane
- 5) cis 1,2-DCE = cis 1,2 Dichloroethene
- 6) 1,1-DCE = 1,1 Dichloroethene
- 7) Maximum Contaminant Levels (MCLs) are enforceable drinking water standards.
- 8) NA Not applicable



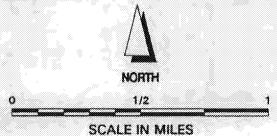


EXPLANATION

♦ Groundwater well UNOCAL property

MW1 Well number

(53') Depth to groundwater in feet MSL (1994)



FORMER MONDO CHROME FACILITY 4933 FIRESTONE BOULEVARD SOUTH GATE, CALIFORNIA

NOTES:

1) All locations and dimensions are approximate.

 Base map from USGS 7.5 minute South Gate (1966, photoravised 1981), California topographic quadrangle.

 Groundwater well data from FUGRO West, Inc., project no. 94-48-1320. Client: TEDESCO LEASING

Project No.: 172-01

FREY ENVIRONMENTAL, INC.

SITE LOCATION MAP

Date: JANUARY 1996

Figure: 1

EXPLANATION

▲ HB6 HAND AUGER BORING LOCATION

B11 BORING LOCATION

▼ VEW1 VAPOR EXTRACTION WELL LOCATION

+FB4/ SOIL SAMPLE LOCATION/VAPOR PROBE LOCATION VP2

MW3 GROUNDWATER MONITORING WELL LOCATION

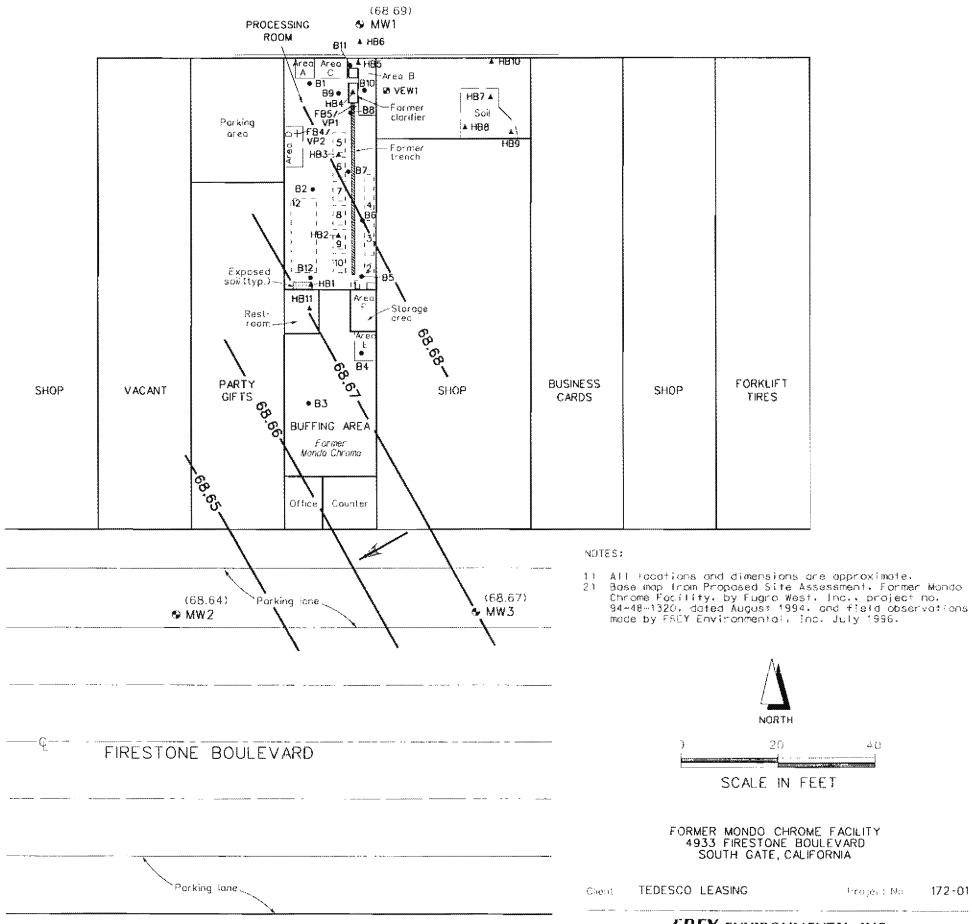
(68.67) With groundwater elevation in feet MSL, on March 3, 1999

-68.67 CONTOUR OF EQUAL GROUNDWATER ELE

CONTOUR OF EQUAL GROUNDWATER ELEVATION in feet MSL, on March 3, 1999

- ESTIMATED GROUNDWATER FLOW DIRECTION

MASON STREET



FREY ENVIRONMENTAL, INC.

SITE SKETCH SHOWING GROUNDWATER ELEVATIONS AND ESTIMATED GROUNDWATER FLOW DIRECTION ON MARCH 3, 1999

Date MARCH 1999

Figure :

APPENDIX A FIELD PROCEDURES/WATER SAMPLING DATA FORMS

WELL PURGING AND GROUND WATER SAMPLING

- The water level, and depth to the bottom of the well in each well, was recorded using a
 conductance probe prior to well purging. A clear bailer sample was taken and visually
 inspected for turbidity and the presence of free product.
- The groundwater monitoring wells were purged of at least three well volumes using a submersible pump.
- 3. The well was allowed to recover to at least 80 percent of its original well volume prior to sampling.
- The ground water samples were collected using a stainless steel bailer held by dedicated nylon line.
- 5. All items entering the well; tapes, conductance probe, bailers were cleaned prior to use and between sampling periods.
- 6. Groundwater collected from each monitoring well was placed into EPA approved, zero head space, 40 milliliters (mL) vials, 250 mL and 500 mL containers.
- 7. Each sample was labeled.
- 8. The samples were placed in a bag, and into an ice chest, and cooled following collection.
- The samples were delivered to the laboratory directly after collection. Sample handling, transport, and delivery to the laboratory were documented using chain of custody procedures and appropriate Chain-of-Custody forms.

JOB NO. 172 - 01

SAMPLING PERSONNEL

Victo Ramirez

WELL NUMBER MV	J I	Well Diameter (ID)	Reference Point TO
WATER DEPTH (R)	. 7	WELL DEPTH 54.50	Feet of H20 in Well 13 - 79

TIME	ELAPSED TIME	GALLONS PURGED	oh	Temp (deg. F)	Cond.	Turbidity	COMMENTS
12:08							Startions
12:03	0 1	1 a	7.06	74.2	1,430		diver warer
12.04	6 a	Ч	6.97	73.4	1.350		live your
W:06	94	18	6.83	72.1	1,220		girth more
2:06		18					Stoppung
			17.50				
			de com				
12:29		100000	7.04	169.8	1,460	<u> </u>	Sample
OTAL GALLONI URGED	5	8.00					

																			سسس			
SA	****							75.5	RGE								734	MP	8.20			
- M	mr.	-							nuc		1 22				. r.v	m we		5898FT (12.0			
200 000			3.3	1					THE	x X					***	*****	***	**		~		
\sim	* 3 14	i FT	`~~		•	í.			1990						M.A.	TE (S	n:				
				1 1		**									:							
				•		*					•											
******		********			 	000000000	 ***********	************		********		***********	 *********	******	***************************************	*****	******	******	*****	***************************************	*****	******

FIELD EQUIPMENT	MODEL NAME/DESK	- Aurion
pH Meter/EC Meter	HV / 9/4	45
Turbidity Meter		
Pump (OlauType)		4.100
Water Level Meter	Sal1	# 47 C
Sailer (Dia.x length)	1. r	

SAMPLE NUMBER			#BOTTLES
4W1-W11	10A5		- J
MW1-WZ	500 ML	DIASE	c 1
MW1-W3	250 ML	ola si	iel

Water Column Thickni	ess) (Multiplier) = One Well Volume	in Gallons
HNCH WELL:	Ft) x (0.65) =	Gallons
	3 Well Volumes =	Gallons
1-7		
HNCHWELL; (<u>) - 79 F1) x (0.16) = 23 + 29</u>	(1) Gallons
	3 Well Volumes = On (フĺ Gallons

FREY ENVIRONMENTAL, INC.

SAMPLING PERSONNEL

VILENO Ramirez

WELL NUMBER 1,	Well Diameter (ID)	Reference Point ——	
WELL NUMBER MULI A	L	1 00	
	WELL NESTU		
MAIER DEFINITION IN A	MELL DEPTH C7 A	Feet of H20 in Well	
70.81	1 33. Q	A 1 17 ~~	

TIME	ELAPSED TIME	GALLONS PURGED	eh	Temp (deg. F)	Cond.	Turbidity	COMMENTS
0:06		0.00					15tart pump
0:07	01	12	6.85	169.8	2,210		guty mater
10:08	02	H	6.79	71.6	0.180		Cirty water
10:09	03	6	6.67	70.1	3.3		Burty Wester
10:09		16					Step pung
			}				
						2000	
11:26			6.91	73.1	3,490	1dirty	Sample
							·
OTAL GALLOI YURGED	V5	16.00					

SAMPLE		PURGE A		URGE PUMPIN	*
ammrum	**************************************	PUNGE 4,	9.57	OUPE LABELIA	9
	*				~~3
DEPTHIFTI LI		METHOD ^{CX}		ATE (GPM)	~~
DEFIRITION LANGE.	٤				C/N
\$ 1 3 1 _	3	17000			
	<u>**</u>		* 3~		

pH Meter/EC Meter	Hydack	<u> </u>
Turbidity Meter		
Pump (Dia_/Type)	2 paux	+ (
Water Level Meter	501,54	#1
Sailer (Dia.x length)	1.5436	#1

SAMPLE NUMBER	#BOTTLES
MWO-HWI YORS	3
MWI-WA 500 ML MACL	
MWI-WZ 250 MC Blank	

WELL VOLUME CALCULATIONS:

(Water Column Thickness) (Multiplier) = One Well Volume in Gallons

4-INCH WELL: (_____FI) x (0.65) * _____ Gallons

3 Well Volumes * _____ Gallons

2-INCH WELL: (12-39Ft) x (0.16) = 1-98 Gallons

3 Well Volumes = 5. 94 Gallons

FREY ENVIRONMENTAL, INC.

DATE 3 - 2 - 77

SAMPLING PERSONNEL

VILLENIO RAMINOS

WELL NUMBER	18	Well Diameter (ID)		Reference Point	
A .		$\sim 10^{-3}$		7.	A.
I IVI \all	S 1	~		/	Name :
		ARTI I DESTELL		te	
(WATER DEPTH (ft)		(YELL DEFIN		Feet of H20 in Well	
un. c	1.1	て フ	11 /	1 12	5d
10.	· ~ .	<i>_)</i>	46	100.	JVL

TIME	ELAPSED TIME	GALLONS PURGED	ph	Temp- (deg. F)	Cond.	Turbidity	COMMENTS
1836							9404- 3100
1:37	01	a	8.23	70-7	1,990		dirty worker
7: 39	03	6	6.77	72.1	a, 340		61747 Wazar
7: 30	04	8	16.75	72.5	2,460		dury water
7:30		8					15 L ₂₀ 3 3 3 3
				1			
						0.00	
11:09			6.90	170.6	a, 670	8:41	-4
OTAL GALLO		18.00					

SAMPLE PURGE PUMPING PURGE PUMPING PATE (GPM)

FIELD EQUIPMENT	MODEL NAME DESCRIPTION
pH Meter/EC Meter	Hydack #5
Turbidity Meter	
Pump (Dia_Type)	2" pums #1
Water Level Meter	S-1, - 1 #1
Sailer (Dia.x length)	11.5× 36" #1

SAMPLE NUMBER	#BOTTLES
MW3-MWI NOAS	7,
MW3-W2500m606	ξ <u>τ</u> ις Ι
MW3-W3-250 MILIA	١ ٥٠٤

WELL VOLUME CALCULATIONS:

(Water Column Thickness) (Multiplier) = One Well Volume in Gallons

4-NCH WELL: (_____FI) x (0.65) * _____ Gallons

3 Well Volumes = _____ Gallons

2-INCH WELL: (12.50 Ft) x (0.16) = 2.00 Gallons

3 Well Volumes ≈ <u>⟨ → → ? </u> Gallon:

FREY ENVIRONMENTAL, INC.

APPENDIX B LABORATORY RESULTS



ASSOCIATED LABORATORIES

806 North Batavia - Orange, California 92868 - 714/771-6900

FAX 714/538-1209

CLIENT Frey Environmental, Inc.

92663

LAB REQUEST 34239

ATTN: Evan Privett 2817A Lafayette Ave.

REPORTED 3/16/99

Newport Beach, CA

RECEIVED 3/3/99

PROJECT Mondo Chrome

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

(7741)

n.	der No.
***	109881
	109882
	109883

Client Sample Identification

MWI MW2 MW3

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES/by,

Edward S. Behare, Ph.D.

Vice President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

The reports of the Associated Laboratories are confidential property of our clients may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

Bohne

TESTING & CONSULTING Chemical Microbiological Environmental Order#: 109881

Client: Frey Environmental, Inc.

Matrix: WATER

Client Sample ID: MWI

Date Sampled: 3/3/99 Time Sampled: Sampled By:

Analyte	Result	DF	DLR	Units	Date/A	nalyst
200.7 ICP Total Metals - Water Only						
Cadmium	l NDI	1	0.004	mg/L	3/ 8/99	МТ
Chromium	0.019	i	0.003	mg/L	3/ 8/99	MT
3500Cr-D Chromium, Hexavalent						
Chromium, Hexavalent	T NDI	I	0.02	mg/L	3/ 3/99	LN
8021 Halogenated Volatile Organics (HVO)						
1,1,1-Trichloroethane	l NDI	20	10.0	ug/L	3/10/99	DC
1,1.2,2-Tetrachloroethane	ND	20	10.0	ug/L	3/10/99	DC
1,1,2-Trichloroethane	ND	20	10.0	ug/L	3/10/99	DC
1,1-Dichloroethane	ND	20	16.0	ug/L	3/10/99	DC
1,1-Dichloroethene	ND	20	16.0	ug/L	3/10/99	DC
1,2-Dibromoethane	ND	20	20.0	ug/L	3/10/99	DC
1,2-Dichlorobenzene	ND	20	20.0	ug/L	3/10/99	DC
1,2-Dichloroethane	ND	20	10.0	ug/L	3/10/99	DC
1,2-Dichloropropane	ND	20	10.0	ug/L	3/10/99	DC
1,3-Dichlorobenzene	ND	20	40.0	ug/L	3/10/99	DC
1,4-Dichlorobenzene	ND	20	20.0	ug/L	3/10/99	DC
2-Chloroethylvinyl ether	ND	20	14.0	ug/L	3/10/99	DC
Bromoform	ND	20	10.0	ug/L	3/10/99	DC
Bromomethane	ND	20	20.0	ug/L	3/10/99	DC
Carbon tetrachloride	NO	20	14.0	ug/L	3/10/99	DC
Chlorobenzene	ND	20	20.0	ug/L	3/10/99	DC
Chloroethane	ND	20	10.0	ug/L	3/10/99	DC
Chloroform	ND	20	10.0	ug/L	3/10/99	DC
Chloromethane	מא	20	20.0	ug/L	3/10/99	DC
Dibromochloromethane	ND	20	10.0	ug/L	3/10/99	DC
Dichlorobromomethane	ND	20	10.0	ug/L	3/10/99	DC
Dichlorodifluoromethane	ND	20	40.0	ug/L	3/10/99	DC
Methylene Chloride	ND	20	20.0	ug/L	3/10/99	DC
Tetrachloroethene	140	20	10.0	ug/L	3/10/99	DC
Trichloroethene	190	20	12.0	ug/L	3/10/99	DC
Trichlorofluoromethane	מא	20	10.0	ug/L	3/10/99	DC
Vinyl chloride	ND	20	20.0	ug/L	3/10/99	DC
cis-1,2-Dichloroethene	מא ו	20	10.0	ug/L	3/10/99	DC
cis-1,3-Dichloropropene	מא ו	20	30.0	ug/L	3/10/99	DC



Order#:

109881 Matrix: WATER

Client: Frey Environmental, Inc.

Client Sample 1D: MWI

Date Sampled: 3/3/99

Time Sampled: Sampled By:

Analyte	Result DF	DLR Units Date/Analyst
8021 Halogenated Volatile Organics (HVO) trans-1,2-Dichloroethene	ND 20	16.0 ug/L 3/10/99 DC
trans-1,3-Dichloropropene	ND 20	30.0 ug/L 3/10/99 DC



Order #: [109882

Client: Frey Environmental, Inc.

Matrix: WATER

Client Sample ID: MW2

Date Sampled: 3/3/99 Time Sampled: Sampled By:

	Analyte		Result	DF	DLR	Units	Date/A	nalyst

<u>200.7 IC</u>	CP Total Metals - Water Only							
	Cadmium	1	NDI	1	0.004	mg/L	3/ 8/99	MT
	Chromium		0.033	1	0.003	mg/L	3/ 8/99	MT
3500Cr	-D Chromium, Hexavalent							
	Chromium, Hexavalent	1	ND	1	0.02	mg/L	3/ 3/99	LN
8021 Ha	alogenated Volatile Organics (HVO)							
	1,1,1-Trichloroethane	T	NDJ	5	2.5	ug/L	3/10/99	DC
**************************************	1,1,2,2-Tetrachloroethane		ND	5	2.5	ug/L	3/10/99	DC
, w	1,1,2-Trichloroethane		ND	5	2.5	ug/L	3/10/99	DČ
	1,1-Dichloroethane		ND	5	4.0	ug/L	3/10/99	DC
	1,1-Dichloroethene	İ	ND	5	4.0	ug/L	3/10/99	DC
	1,2-Dibromoethane		ND	5	5.0	ug/L	3/10/99	DC
	1,2-Dichlorobenzene		ND	5	5.0	ug/L	3/10/99	DC
	1,2-Dichloroethane		ND	5	2.5	ug/L	3/10/99	DC
	1,2-Dichloropropane	1	ND	5	2.5	ug/L	3/10/99	DC
	1,3-Dichlorobenzene		ND	5	10.0	ug/L	3/10/99	DC
	1,4-Dichlorobenzene		ND	5	5.0	ug/L	3/10/99	DC
*	2-Chloroethylvinyl ether	i	ND	5	3.5	ug/L	3/10/99	DC
	Bromoform		ND	5	2.5	ug/L	3/10/99	DC
	Bromomethane	i	ND	5	5.0	ug/L	3/10/99	DC
300	Carbon tetrachloride	i	ND	5	3.5	ug/L	3/10/99	DC
	Chlorobenzene		ND	5	5.0	ug/L	3/10/99	DC
***	Chloroethane		dи	5	2.5	ug/L	3/10/99	DC
.500	Chloroform		ND	5	2.5	ug/L	3/10/99	DC
**	Chloromethane		IdN	5	5.0	ug/L	3/10/99	DC
- 109	Dibromochloromethane		ND	5	2.5	ug/L	3/10/99	DC
.000	Dichlorobromomethane		ND	5	2.5	ug/L	3/10/99	DC
1000	Dichlorodifluoromethane		ND	5	10.0	ug/L	3/10/99	DC
(40.00	Methylene Chloride		ND	5	5.0	ug/L	3/10/99	DC
	Tetrachioroethene		6.5	5	2.5	ug/L	3/10/99	DC
	Trichloroethene		130	5	3.0	ug/L	3/10/99	DC
	Trichlorofluoromethane	1	NDI	5	2.5	ug/L	3/10/99	DC
- 64	Vinyl chloride	- 1	ND	5	5.0	ug/L	3/10/99	DC
%	cis-1,2-Dichloroethene			5	2.5			
	CIS+L2+DICRIOFOEINERE	3.	13]		7 / Jan 1997	ug/L	3/10/99	DC



Order #: [109882

Client: Frey Environmental, Inc.

Matrix: WATER

Client Sample ID: MW2

Date Sampled: 3/3/99 Time Sampled: Sampled By:

Analyte	Result [DF DLR Units	Date/Analyst
8021 Halogenated Volatile Organics (HVO)			
trans-1,2-Dichloroethene	ND	5 4.0 ug/L	3/10/99 DC
trans-1,3-Dichloropropene	ND	5 7.5 ug/L	3/10/99 DC



Order#:

109883

Client: Frey Environmental, Inc.

Matrix: WATER

Client Sample ID: MW3

Date Sampled: 3/3/99 Time Sampled: Sampled By:

	Analyte		Result	DF	DLR	Units	S Date/A	nalyst
200.7 10	CP Total Metals - Water Only							
	Cadmium		NDI	1	0.004	mg/L	3/ 8/99	MT
	Chromium		0.068	T	0.003	mg/L	3/ 8/99	MT
<u>3500Cr</u>	-D Chromium, Hexavalent							
200	Chromium, Hexavalent	I	NDI	1	0.02	mg/L	3/ 3/99	LN
8021 Hi	alogenated Volatile Organics (HVO)							
···	1,1,1-Trichloroethane	1	NDJ	5	2.5	ug/L	3/10/99	DC
	1,1,2,2-Tetrachloroethane		ND	5	2.5	ug/L	3/10/99	DC
	1,1,2-Trichloroethane		ND	5	2.5	ug/L	3/10/99	DC
	1,1-Dichloroethane		ND	5	4.0	ug/L	3/10/99	DC
1,000	1.1-Dichloroethene		ND	5	4.0	ug/L	3/10/99	DC
35.46 33.46	1,2-Dibromoethane		ND	5	5.0	ug/L	3/10/99	DC
**	1,2-Dichlorobenzene		DI	5	5.0	ug/L	3/10/99	DC
	1,2-Dichloroethane		ND	5	2.5	ug/L	3/10/99	DC
	1,2-Dichloropropane		ND	5	2.5	ug/L	3/10/99	DC
	1,3-Dichlorobenzene		ND	5	10.0	ug/L	3/10/99	DC
*	1,4-Dichlorobenzene		ND	5	5.0	ug/L	3/10/99	DC
	2-Chloroethylvinyl ether		ND	5	3.5	ug/L	3/10/99	DC
	Bromoform		ND	5	2.5	ug/L	3/10/99	DC
**	Bromomethane		ND	5	5.0	ug/L	3/10/99	DC
***	Carbon tetrachloride		ND	5	3.5	ug/L	3/10/99	DC
-1960	Chlorobenzene	Ī	ND	5	5.0	ug/L	3/10/99	DC
J.	Chloroethane	İ	ND	5	2.5	ug/L	3/10/99	DC
- See	Chloroform	Ī	ND	5	2.5	ug/L	3/10/99	DC
-	Chloromethane	İ	ND	5	5.0	ug/L	3/10/99	DC
cce	Dibromochloromethane		ND	5	2.5	ug/L	3/10/99	DC
	Dichlorobromomethane	İ	ND	5	2.5	ug/L	3/10/99	DC
2000	Dichlorodifluoromethane		ND	5	10.0	ug/L	3/10/99	DC
•••	Methylene Chloride	-	ND	. 5 .	5.0	ug/L	3/10/99	DC
ngo	Tetrachloroethene		5.1	5	2.5	ug/L	3/10/99	DC
è	Trichloroethene	.	100	5	3.0	ug/L	3/10/99	DC
	Trichlorofluoromethane	i	ND	5	2.5	ug/L	3/10/99	DC
-20.00	Vinyl chloride	1	ND	5	5.0	ug/L	3/10/99	DC
·	cis-1,2-Dichloroethene	I	6.4	5	2,5	ug/L	3/10/99	DC
	cis-1,3-Dichloropropene		ND	5	7.5	ug/L	3/10/99	DC



Order #: 109883

Client: Frey Environmental, Inc.

Matrix: WATER

Client Sample ID: MW3

Date Sampled: 3/3/99 Time Sampled: Sampled By:

Analyte Analyte	Result DF	DLR L	Inits Date/Analyst
8021 Halogenated Volatile Organics (HVO)			
trans-1,2-Dichloroethene	NDJ 5	4.0 u	g/L 3/10/99 DC
trans-1,3-Dichloropropene	NDJ 5	7.5 u	g/L 3/10/99 DC



ASSOCIATED LABORATORIES QA REPORT FORM - INORGANICS

QC Sample:

LR 34239

Matrix:

WATER

Prep. Date:

03/03/99

Analysis Date:

03/03/99

ID#'s in Batch:

LR 34239, 34231

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT

Reporting Units =

mg/L

Test Method	Sample Result N	Spike ND Added		Matrix ike Dup	%Rec MS	%Rec RPD
Cr+6 3500Cr_D	0.02	U 1.00	0.97	1.00	97.0	100.0 3.0

%REC LIMITS = 70 - 130 RPD LIMITS = 30

ND = "U" - Not Detected

RPD = Relative Percent Difference of Matrix Spike and Matrix Spike Duplicate
%REC-MS & MSD = Percent Recovery of Matrix Spike & Matrix Spike Duplicate

PREPARATION BLANK / LAB CONTROL SAMPLE RESULTS

PREP BLAN	K	LCS									
Value	ND	Result	True	%Rec	LLimit	H.Limit					
0.02	U	0.47	0.50	94.0	80%	120%					

Value = Preparation Blank Value; ND = "U" for Not-Detected

LCS Result = Lab Control Sample Result

True = True Value of LCS

L.Limit / H.Limit = LCS Control Limits

ASSOCIATED LABORATORIES OA REPORT FORM - ORGANICS

QC Sample:

LFB030899

Matrix:

WATER

Prep. Date:

03/08/99

Analysis Date:

03/08/99

Lab ID#'s in Batch:

LR 34193, 34268, 34267, 34194, 34149, 34159, 34269, 34150, 34272, 34270, 34414,

34279, 34231, 34242, 34239

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT

REPORTING UNITS =

ug/L

COMPOUND	Method	Sample Result	ND	Spike Added	Matrix Spike	Matrix Spk. Dup	%REC MS	%REC MSD	% RPD	PREP. Black
1,1-Dichloroethane	8021	0.0	U	10	10.128	8.924	101.3	89.2	13	ND
Chioroform	8021	0.0	U	10	12.064	11.762	120.6	117.6	3	ND
1,2-Dichloropropane	8021	0.0	U	10	10.270	9.688	102.7	96.9	6	ND
cis-1,3-Dichloropropene	8021	0.0	U	10	9.874	8.554	98.7	85.5	14	ND
trans-1,3-Dichloropropene	8021	0.0	U	10	10.182	8.688	101.8	86.9	16	ND
cis-1,2-Dichloroethene	8021	0.0	U	10	10.428	9.538	104.3	95.4	9	ND
trans-1,2-Dichloroethene	8021	0.0	U	10	10.890	9.078	108.9	90.8	18	ND
1,1,1-Trichloroethane	8021	0.0	U	10	9.654	9.428	96.5	94.3	2	ND
Trichloroethene	8021	0.0	U	10	11.376	10.646	113.8	106.5	7	ND
Tetrachioroethene	8021	0.0	U	10	10.750	10.556	107.5	105.6	2	ND
1,1,2-Trichioroethane	8021	0.0	U	10	11.780	10.834	117.8	108.3	8	ND
Carbon tetrachloride	8021	0.0	U	10	10.984	10.586	109.8	105.9	4	ND
Chlorobenzene	8021	0.0	U	10	11.646	11.242	116.5	112.4	4	ND
Benzene	8021	0.0	U	10	11.008	9.736	110.1	97.4	12	ND
Toluene	8021	0.0	U	10	10.802	9.524	108.0	95.2	13	ND
1,3-Dichlorobenzene	8021	0.0	U	10	10.651	9.568	106.5	95.7	11	ND
1,4-Dichlorobenzene	8021	0.0	U	10	10.289	9 293	102.9	92.9	10	ND
1.2-Dichlorobenzene	8021	0.0	U	10	11.523	10.868	115.2	108.7	6	ND

ND = "U" for Not - Detected

RPD = Relative Percent Difference of Matrix Spike and Matrix Spike Duplicate

%REC-MS & MSD = Percent Recovery of Matrix Spike and Matrix Spike Duplicate

%REC LIMITS = 65 - 135 RPD LIMITS = 35

ASSOCIATED LABORATORIES LCS RECOVERY

Method:

8021

Matrix:

WATER

Prep. Date:

03/08/99

Analysis Date:

03/08/99

Lab. Number:

LR 34193, 34268, 34267, 34194, 34149, 34159, 34269, 34150, 34272,

34270, 34414, 34279, 34231, 34242, 34239

REPORTING UNITS =

ug/L

COMPOUND	Recovered	True Value	LIMITS
1,1,2-Trichloroethane	8,9	10.0	8 - 12
1,1-Dichloroethane	8.6	10.0	8 - 12
Tetrachloroethene	10.5	10.0	8 - 12
Trichloroethene	10.4	10.0	8 - 12
Benzene	11.0	10.0	8 - 12
Toluene	10.9	10.0	8 - 12
1,3-Dichlorobenzene	10.1	10.0	8 - 12
1,4-Dichlorobenzene	9.9	10.0	8 - 12
1,2-Dichlorobenzene	10.8	10.0	8 - 12

ASSOCIATED LABORATORIES

QA REPORT FORM (MS/MSD)

QC Sample:

LR34224 - 109848

Matrix:

WATER

Prep. Date:

03/05/99

Analysis Date:

03/08/99

Lab ID#'s in Batch:

LR 34239, 33598, 33648, 33699, 33647, 34265, 34318, 34330, 33599, 34266

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RESULT

REPORTING UNITS = mg/L

		Sample		Spike	Matrix	Matrix	%Rec	%Rec		
TEST	Method	Result	ND	Added	Spike	Spike Dup	MS	MSD	RPD	
Arsenic	200.7	0.003	U	0.10	0.082	0.084	82.0	84.0	2.4	
Selenium	200.7	0.004	U	0.10	0.080	0.084	80.0	84.0	4.9	
Thallium	200.7	0.003	U	0.10	0.084	0.082	84.0	82.0	2.4	
Lead	200.7	0.003		0.20	0.175	0.174	86.0	85.5	0.6	
Antimony	200.7	0.030	U	1.25	1.25	1.29	100.0	103.2	3.1	
Aluminum	200.7	0.052	U	1.25	1.23	1,28	98.4	102.4	4.0	
Barium	200.7	0.065		1.25	1.30	1.33	98.8	101.2	2.3	
Beryllium	200.7	0.001	U	1.25	1.24	1.26	99.2	100.8	1.6	
Boron	200.7	0.170		1.25	1.32	1.33	92.0	92.8	0.8	
Cadmium	200.7	0.004	U	1.25	1.25	1.27	100.0	101.6	1.6	
Chromium	200.7	0.003	U	1.25	1.24	1.25	99.2	100.0	0.8	
Cobalt	200.7	0.005	U	1.25	1,26	1.28	100.8	102.4	1.6	
Copper	200.7	0.004	U	1.25	1.23	1.26	98.4	100.8	2.4	
Iron	200.7	2.100		1.25	3.12	3.14	81.6	83.2	0.6	
Manganese	200.7	0.098		1.25	1.34	1.36	99,4	101.0	1.5	
Molybdenum	200.7	0.010	U	1.25	1.27	1.30	101.6	104.0	2,3	
Nickel	200.7	0.008	U	1.25	1.24	1.25	99.2	100.0	0.8	
Vanadium	200.7	0.005	U	1.25	1.24	1.26	99.2	100.8	1.6	
Zinc	200.7	0.023		1.25	1.28	1.30	100.6	102.2	1.6	
Silver	200.7	0.005	U	0.50	0.449	0.465	89.8	93.0	3.5	

ND = "U" - Not Detected

RPD = Relative Percent Difference of Matrix Spike and Matrix Spike Duplicate %REC-MS&MSD = Percent Recovery of Matrix Spike & Matrix Spike Duplicate

% REC LIMITS = 75 - 125 RPD LIMITS = 20



ASSOCIATED LABORATORIES

806 N. Batavia • Orange, CA 92868 (714) 771-6900 • FAX: (714) 538-1209

34339

CHAIN OF CUSTODY RECORD

Date 3-3-91 Page of ...

CLIENT FREY	2 ENVIRONNENTAL	INC										
ADDRESS 2817 A LAFAYETTE AVE. NEWPORT BEACH, CA 92663 PROJECT NAME MOUDO CHROME		AVE.	PROJECT MANAGER EVAN PRIVETT PHONE NUMBER 949-733-1645 SAMPLERS: (Signature)							Samples Intact Yes No County Seals Intact Yes No Sample Ambient Cooled Frozen Same Day 24 Hr Regular 48 Hr		
		- 000										
SAMPLE NUMBER			DATE	TIME	SAMPLE TY WATER AIR		SOLID	NO OF CNTNAS	SUSP. CONTAM	TESTS REQUIRED		
MWI-WI	voAs		3-5-41		V			3		EPA 8010		
MW1 - WZ	500 ML PLAST,							ı		Hex. CHRONIUM		
mwi-ws	250 ML PLASTIC	•						ı		CHROMIUM & CADMIUM		
mω2-ω	voAs							2		EPA 8010		
MWZ-WZ	500 ML PLASTIC							1		HEX. CHROMIUM		
mwz-ws	2510 AL PLASTIC							l		CHROMIUM & CADMIUM		
mw3-ui	VOAS							3		EPA 80.0		
mw3:wL	500 ML PLASTIC							1		Hex. CHROMIUM		
mw5-w3	250 ML PLASING		V		V .					CHROMIUM & CADMUIN		
			1.7									
Relinquished by: (Signature) Received I		1	by (Signature) Lighy by Laboratory for analysis:					Date/Time 3-3-99 Date/Time		I hereby authorize the performance of the ab indicated work		
							Date					
Special Instruction			*				DISTRIBL	TION: White with report. Yellow to AL,				